

ABSTRACT

A disclosed method for forming a non-volatile memory cell includes forming a component stack including an electron trapping layer on a substrate surface. A dielectric layer is formed over the component stack, and a portion is removed such that a remainder of the dielectric layer exists substantially along sidewalls of the component stack. An oxide layer is formed over a bit line in the substrate adjacent to the component stack, and an electrically conductive layer is formed over the component stack and the oxide layer. A described non-volatile memory cell includes a component stack on a substrate surface, the component stack including an electron trapping layer. Multiple dielectric spacers are positioned along sidewalls of the component stack. An oxide layer is positioned over a bit line in the substrate adjacent to the component stack, and an electrically conductive layer is positioned over the component stack and the oxide layer.